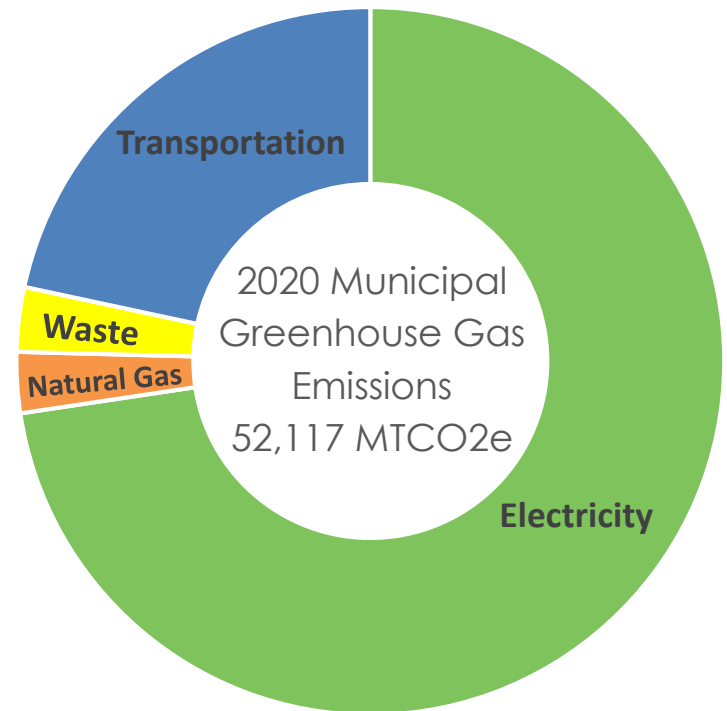
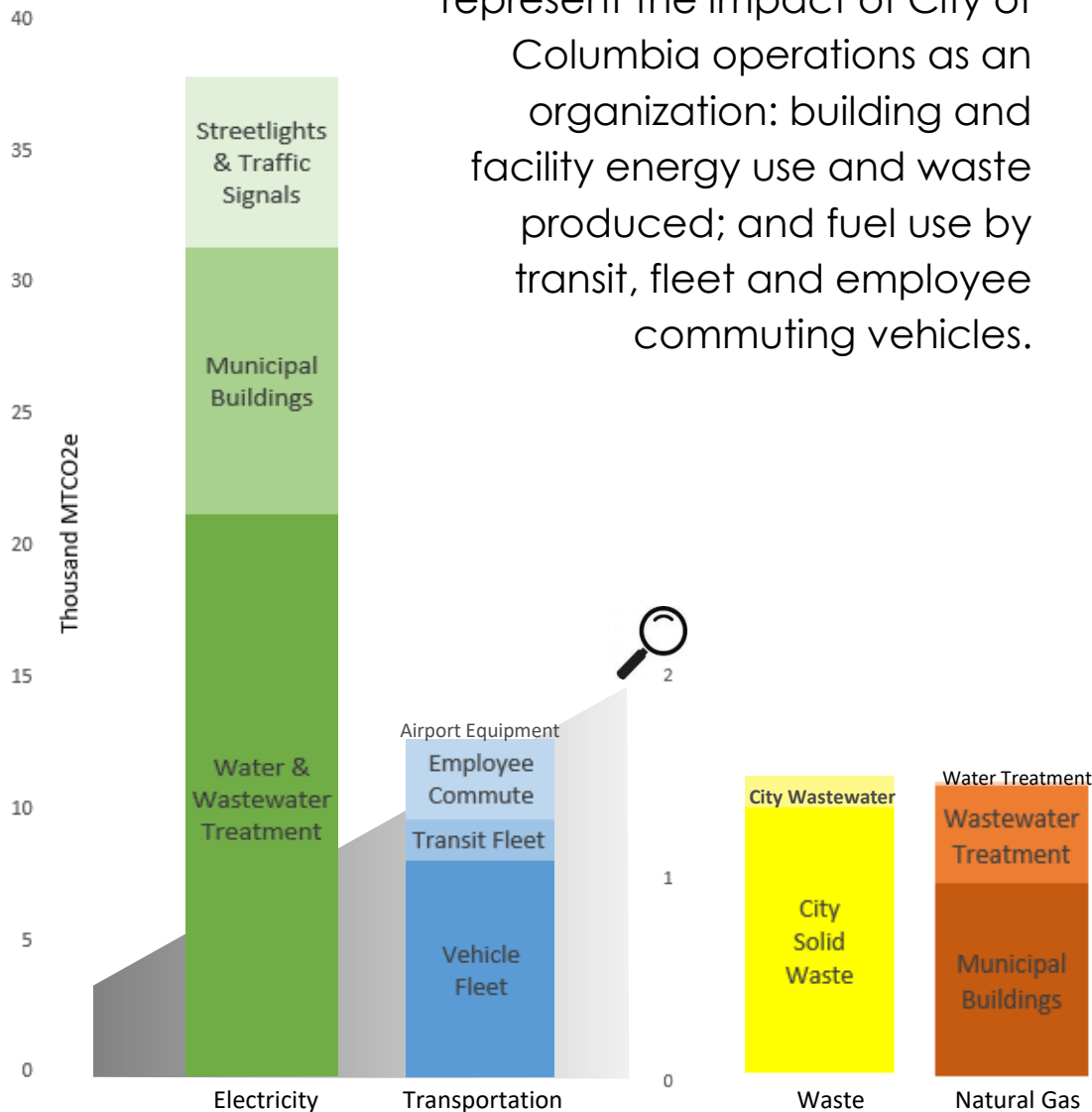


# City of Columbia 2020 Municipal Emissions Report

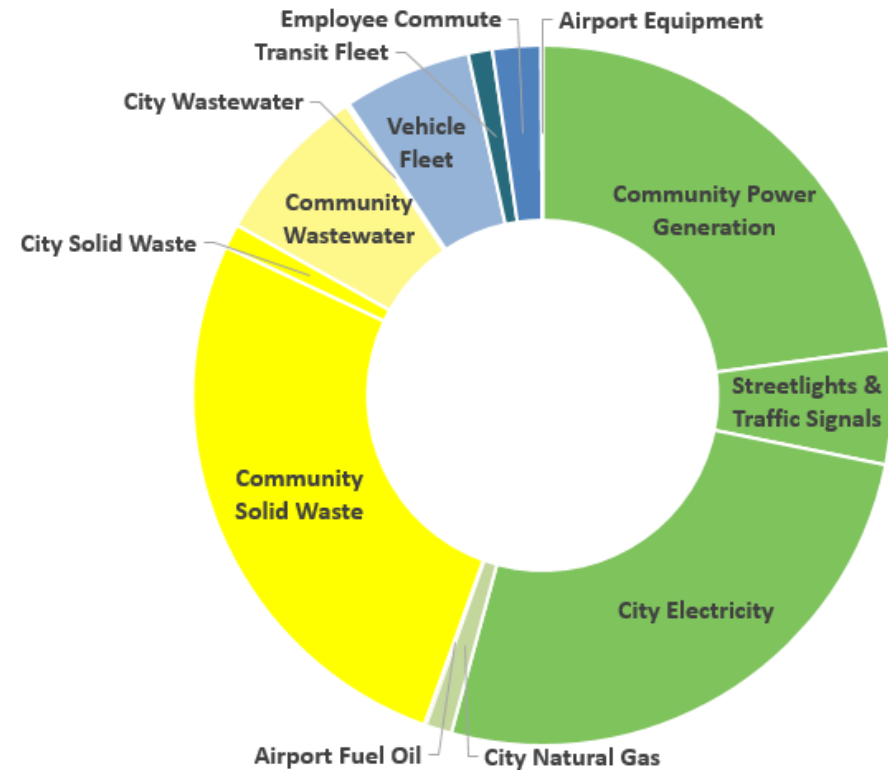
The emissions reported here represent the impact of City of Columbia operations as an organization: building and facility energy use and waste produced; and fuel use by transit, fleet and employee commuting vehicles.



This report includes emissions associated with energy use and waste produced by municipal operations only. Community energy production and waste treatment process emissions account for an additional 68,474 MTCO2e.

# 2020 Municipal Emissions Including Community Power Generation & Community Waste Processing Emissions

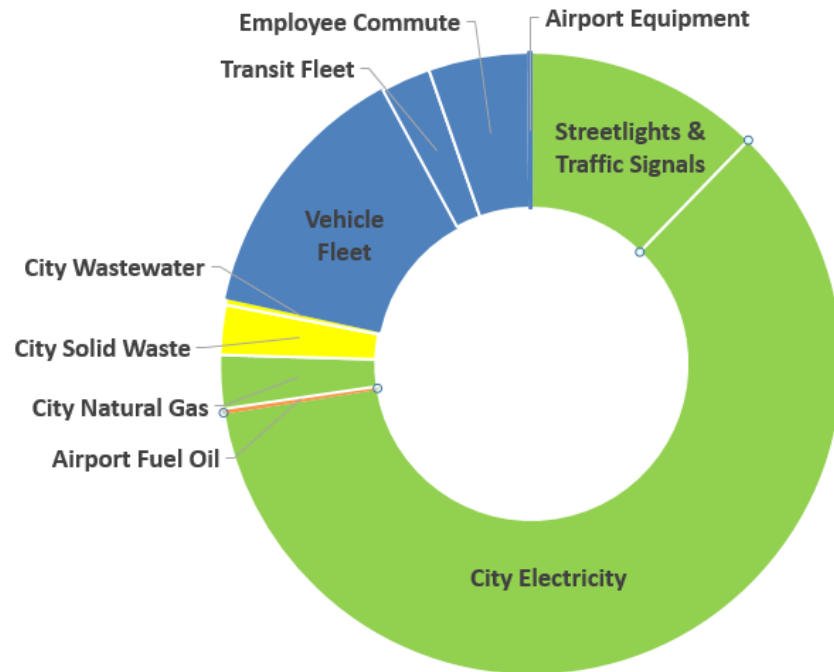
Total GHG Emissions by Sector & Source		MTCO2e
<b>Energy</b>		<b>66,924</b>
Community Power Generation		27,595
Streetlights and Traffic Signals		6,390
Facility Electricity		31,391
Facility Natural Gas		1,445
Airport Fuel Oil		103
<b>Waste</b>		<b>42,411</b>
Community Solid Waste (Landfill)		31,932
City Solid Waste		1,344
Community Wastewater		8,947
City Wastewater		188
<b>Transportation</b>		<b>11,256</b>
Vehicle Fleet		7,133
Transit Fleet		1,342
Employee Commute		2,701
Airport Equipment		80
<b>TOTAL</b>		<b>120,591</b>



Columbia, MO provides a full range of services to the community, including electricity, solid waste and wastewater treatment. These services also contribute to the greenhouse gas emissions for Columbia as a community and a municipal organization. The above calculations include emissions from both municipal operations and community services provided. Emissions from the electricity generating assets controlled by the City of Columbia represent 27,595 MTCO<sub>2</sub>e (23%) of the 2020 municipal inventory. Community solid waste and wastewater emissions total 40,879 MTCO<sub>2</sub>e (34%) in the 2020 municipal inventory. Reporting total emissions from these municipally controlled waste and energy sources is important and will continue to inform broader process changes and our progress toward meeting reduction goals. In order to more directly report the impact of our daily operations on the municipal inventory, the analysis below removes emissions of non-municipal activities from the energy and waste sectors

# 2020 Emissions from Municipal Operations

Total GHG Emissions by Sector & Source		MTCO <sub>2</sub> e
<b>Energy</b>		<b>39,329</b>
	Streetlights & Traffic Signals	6,390
	Facility Electricity	31,391
	Airport Fuel Oil	103
	Facility Natural Gas	1,445
<b>Waste</b>		<b>1,532</b>
	Facility Solid Waste	1,344
	Facility Wastewater	188
<b>Transportation</b>		<b>11,256</b>
	Vehicle Fleet	7,133
	Transit Fleet	1,342
	Employee Commute	2,701
	Airport Equipment	80
<b>TOTAL (excluding non-municipal process emissions)</b>		<b>52,117</b>



The distribution of City of Columbia's operational emissions across sectors resembles that of the Community's sector emissions, with 75% of emissions coming from facility energy, 22% from transportation and 3% from waste process emissions. Electricity usage by City facilities and buildings accounts for 80% of energy emissions and 60% of all operations emissions. Streetlights and traffic signals account for 16% of energy emissions and 12% of all operations emissions. Facility use of natural gas and fuel oil (airport use only) make up the remaining 4% of energy emissions and represent 3% of total operational emissions.

Municipal waste emissions are made up of wastewater at 12% and solid waste at 88%. They are the fraction of total process emissions from the municipal landfill and wastewater treatment plant estimated to be from municipal wastewater and solid waste.

Transportation emissions are comprised of Columbia Regional Airport equipment use, the City of Columbia's fleet and transit vehicles, and employee commuting activity. Fleet vehicle activities make up 63% of municipal transportation emissions and 14% of total operational emissions. Transit activities contribute 12% to transportation and 3% to total municipal operations, and employee commute contributes 24% and 5%, respectively.